

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-12. (Canceled)

13. (Previously Presented) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 18, wherein the thermal conductivity λ (W/mK) of the honeycomb structure is calculated from the following expression (1):

$$\lambda = QH \cdot [L / (T1 - T2)] \quad (1)$$

where the thermal conductivity λ (W/mK) of the honeycomb structure is specified in relation to:

an amount of heat flow QH (W/m2) = $[(Q1 + Q2)/2]$, each of $Q1$ (W/m2) and $Q2$ (W/m2) being obtained by measuring an amount of heat flow at each contact member using a heat flow meter connected with the contact member;

a distance L (m) between the two ends of the honeycomb structure; and

temperatures $T1$ (K) and $T2$ (K) of the two ends of the honeycomb structure in the steady temperature state of the whole honeycomb structure.

14-15. (Canceled)

16. (Previously Presented) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 18, wherein a sheet having flexibility is used as the high-thermal-conductivity member.

17. (Previously Presented) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 13, wherein a sheet having flexibility is used as the high-thermal-conductivity member.

18. (Currently Amended) A method for measurement of thermal conductivity of a honeycomb structure having an axial direction, two ends, and a plurality of through-holes surrounded by partition walls extending in the axial direction, the method comprising the steps of:

contacting the two ends of the honeycomb structure with contact members;
covering exposed sides of the honeycomb structure with heat-insulating material;
keeping the whole honeycomb structure in a steady temperature state with keeping two ends of the honeycomb structure at given different temperatures; and
measuring a thermal conductivity of the honeycomb structure in the steady state,
wherein:

the contact members are kept at given different temperatures and are contacted with the two ends of the honeycomb structure to keep the two ends of the honeycomb structure at given different temperatures;

the two ends of the honeycomb structure and the contact members are contacted with each other via high-thermal-conductivity members; and

each high-thermal-conductivity member is made of a film formed by applying a paste containing a substance of high thermal conductivity, on a contact face of the honeycomb structure and/or the contact member.

19-21. (Canceled)

22. (Previously Presented) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 18, wherein a contact pressure between the contact member and the end of the honeycomb structure is set at 1 to 10 kg/cm².

23. (Canceled)

24. (Previously Presented) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 18, wherein the honeycomb structure is made of a material having a thermal conductivity of 1 (W/mK) or more.

25. (Previously Presented) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 18, wherein the honeycomb structure contains at least one kind selected from the group consisting of silicon carbide, a composite of silicon carbide and metallic silicon, and silicon nitride.

26. (New) The method for measurement of thermal conductivity of a honeycomb structure according to Claim 18, wherein at least one of the through-holes is plugged at one of the two ends of the honeycomb structure.